## UNITED STATES PATENT AND TRADEMARK OFFICE **CERTIFICATE OF CORRECTION**

PATENT NO.

: 6,978,720 B2

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APPLICATION NO.: 10/695558

DATED INVENTOR(S) : December 27, 2005 : Kent N. Johnson

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page should be deleted and substitute therefore the attached title page.

Drawings:

Delete drawings Figs. containing Figs 1-14 and substitute therefore drawings consisting of Figs.1-14 as shown on the attached pages

Signed and Sealed this

Twenty-fourth Day of October, 2006

JON W. DUDAS Director of the United States Patent and Trademark Office

## (12) United States Patent Johnson

(10) Patent No.: (45) Date of Patent:

US 6,978,720 B2 Dec. 27, 2005

(54)	GONDOLA RAILCAR CONSTRUCTION					
(76)	Inventor:	Kent N. Johnson, 178 Seven Forks Rd., Martin, GA (US) 30557				
(*)	Notice:	Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.				
(21)	Appl. No.: 10/695,558					
(22)	Filed:	Oct. 28, 2003				
(65)	Prior Publication Data					
	US 2005/0	0087097 A1 Apr. 28, 2005				
	Int. Cl. <sup>7</sup>					
(58)	Field of Search					

References Cited

U.S. PATENT DOCUMENTS

(56)

821,490 A \* 827,266 A \*

860,029	A	٠	7/1907	Irwin 105/380
1,261,604	٨	٠	4/1918	Pearson 105/380
3,605,634	٨		9/1971	Johnson
3,605,635	Α		9/1971	Stark
3,769,918			11/1973	Przyblinski et al.
3,866,545	Α		2/1975	Неар
4,356,776	Α		11/1982	Brodeur et al.
4,417,526	A		11/1983	Marulic et al.
5,341,747			8/1994	Fetterman et al.
5,388,529				Tieberghien et al.
5,813,353			9/1998	
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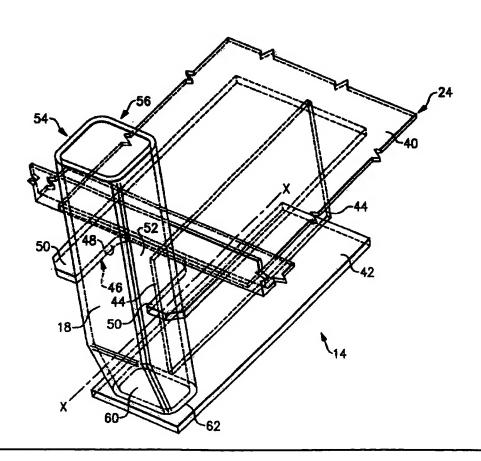
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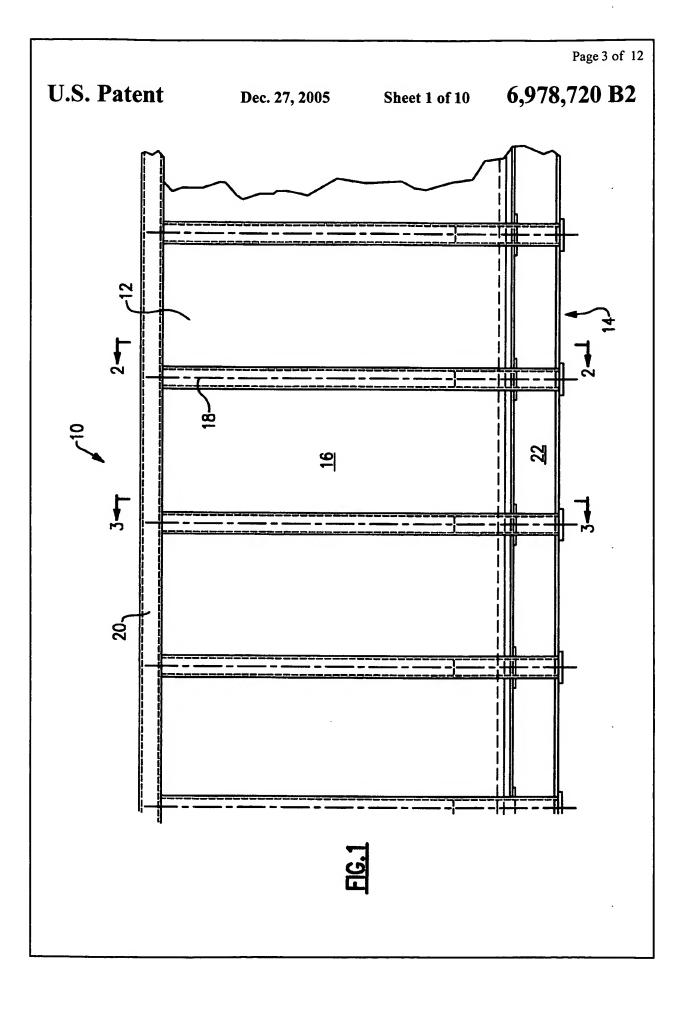
Primary Examiner—Mark T. Lo (74) Attorney, Agent, or Firm—Hodgson Russ LLP

## (57) ABSTRACT

A gondola railcar having a plurality of side posts connected to the underframe for a high strength construction. The underframe includes a plurality of cross-bearing members having an upper flange, a lower flange and at least one vertical web connecting the two flanges. The upper flange has an opening disposed therein that receives the side post such that the side post abuts with the upper flange inside the opening. The side post also abuts with an end of the vertical web, and an end portion of the side post abuts with the lower flange of the cross-bearing member.

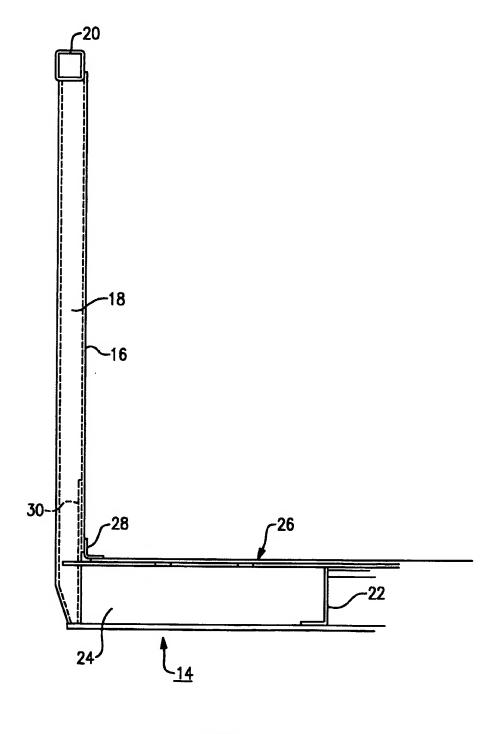
## 18 Claims, 10 Drawing Sheets





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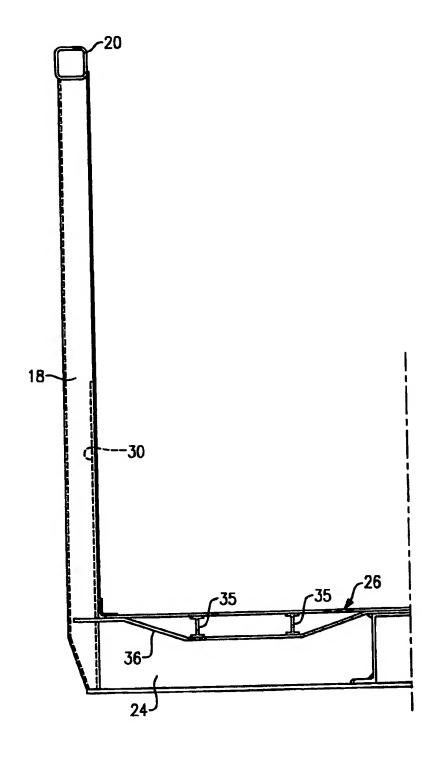
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<u>FIG.2</u>



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<u>FIG.3</u>

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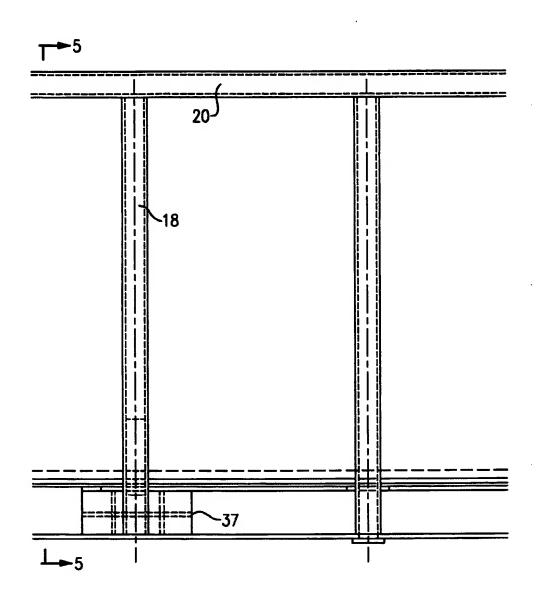
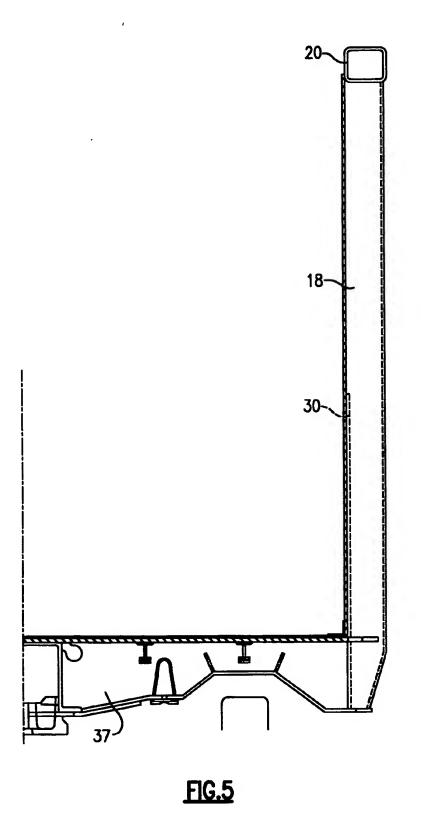


FIG.4

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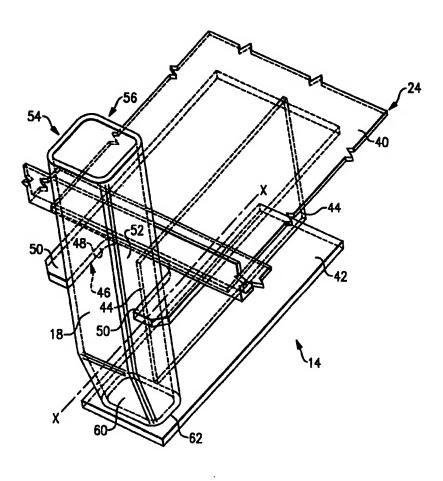


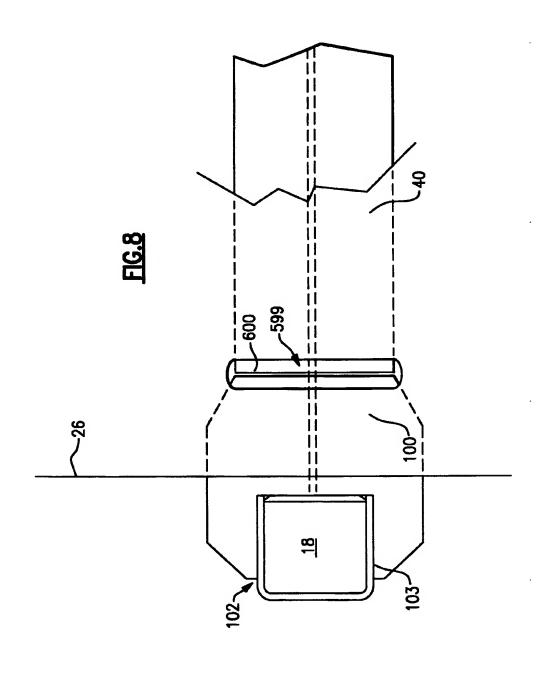
FIG.6

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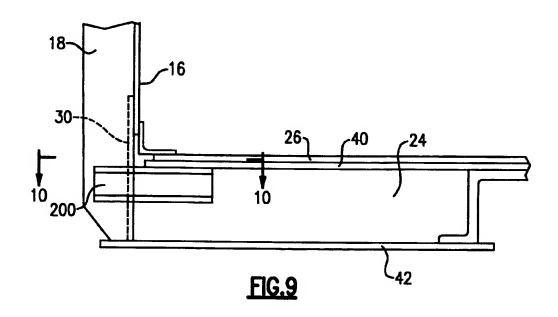
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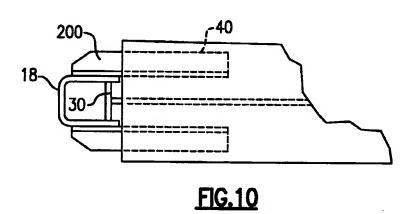
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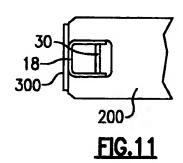


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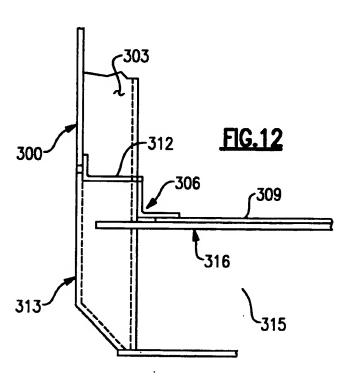


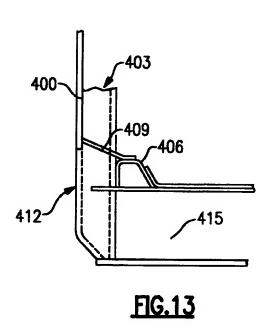


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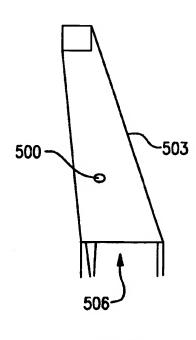


FIG.14